CLAIMS

1. A method for manufacturing a semiconductor device comprising:

forming a first conductive film pattern by discharging a conductive material containing a photosensitive material over an insulating surface of a substrate by droplet discharging;

selectively exposing the first conductive film pattern to laser light; and

forming a second conductive film pattern by developing the exposed first conductive film pattern.

2. A method for manufacturing a semiconductor device according to claim 1, wherein the conductive material containing a photosensitive material comprises a material selected from the group consisting of Ag, Au, Cu, Ni, Al or Pt, and a compound thereof.

3. A method for manufacturing a semiconductor device according to claim 1, wherein the photosensitive material is a negative type photosensitive material.

4. A method for manufacturing a semiconductor device according to claim 1, wherein the photosensitive material is a positive type photosensitive material.

5. A method for manufacturing a semiconductor device comprising:

forming a first conductive film pattern by discharging a conductive material containing a photosensitive material over an insulating surface of a substrate by droplet discharging;

selectively exposing the first conductive film pattern to laser light;

forming a second conductive film pattern having a narrower width than that of the first conductive film pattern by developing the exposed first conductive film pattern;

forming a gate insulating film covering the second conductive film pattern; and

forming a semiconductor film over the gate insulating film.

6. A method for manufacturing a semiconductor device according to claim 5, wherein the conductive material containing a photosensitive material comprises a material selected from the group consisting of Ag, Au, Cu, Ni, Al or Pt, and a compound thereof.

7. A method for manufacturing a semiconductor device according to claim 5, wherein the photosensitive material is a negative type photosensitive material.

8. A method for manufacturing a semiconductor device according to claim 5, wherein the photosensitive material is a positive type photosensitive material.

9. A method for manufacturing a semiconductor device comprising:

forming a gate electrode over an insulating surface of a substrate;

forming a gate insulating film covering the gate electrode;

forming a first semiconductor film over the gate insulating film;

forming a first conductive film pattern by discharging a conductive material containing a positive type photosensitive material over the first semiconductor film;

exposing a selected portion of the first conductive film pattern to laser light;

forming a source electrode and a drain electrode by developing the exposed first conductive film pattern; and

etching the first semiconductor film using the source electrode and the drain electrode as masks.

10. A method for manufacturing a semiconductor device according to claim 9, further comprising a step of forming a second semiconductor film containing an impurity element imparting n-type or p-type conductivity over the first semiconductor film.

11. A method for manufacturing a semiconductor device according to claim 10,

further comprising a step of etching the second semiconductor film using the source electrode and the drain electrode as masks

12. A method for manufacturing a semiconductor device according to claim 9, wherein the conductive material containing the positive type photosensitive material is discharged by droplet discharging.

13. A method for manufacturing a semiconductor device comprising:

forming a gate electrode over a first surface of a substrate;

forming a gate insulating film covering the gate electrode;

forming a first semiconductor film over the gate insulating film;

forming a first conductive film pattern by discharging a conductive material containing a negative type photosensitive material over the first semiconductor film;

exposing a portion of the first conductive film pattern to laser light by emitting the laser light from a side of a second surface of the substrate using the gate electrode as a mask wherein the second surface is opposite to the first surface;

forming a source electrode and a drain electrode by developing the exposed first conductive film pattern; and

etching the first semiconductor film using the source electrode and the drain electrode as masks.

14. A method for manufacturing a semiconductor device according to claim 13, wherein the substrate has an insulating surface.

15. A method for manufacturing a semiconductor device according to claim 13, further comprising a step of forming a second semiconductor film containing an impurity element imparting n-type or p-type conductivity over the first semiconductor film.

16. A method for manufacturing a semiconductor device according to claim 15,

further comprising a step of etching the second semiconductor film using the source electrode and the drain electrode as masks

17. A method for manufacturing a semiconductor device according to claim 13, wherein the conductive material containing the positive type photosensitive material is discharged by droplet discharging.

18. A method for manufacturing a semiconductor device according to claim 13, wherein the source electrode and the drain electrode are formed in a self-aligning manner to have a space therebetween that is the same as a width of the gate electrode.

19. A semiconductor film comprising:

at least one of a gate wiring and a gate electrode over an insulating surface of a first substrate;

a gate insulating film over at least one of the gate wiring and the gate electrode;

a semiconductor layer including a channel formation region over the gate insulating film; and

a source electrode or a drain electrode formed over the semiconductor layer,

wherein a channel length of the channel formation region and a space between the source electrode and the drain electrode have widths that are the same as that of the gate electrode.

20. A semiconductor device according to claim 19, further comprising a pixel electrode formed over the source electrode or the drain electrode.

21. A semiconductor device according to claim 19, wherein the semiconductor layer including the channel formation region is an amorphous single crystalline semiconductor film added with hydrogen or a hydrogen halide, or a polycrystalline semiconductor film.

22. A semiconductor device according to claim 19, wherein the source electrode or the drain electrode contains a photosensitive material.

23. A semiconductor device according to claim 19, wherein the semiconductor device comprises a first substrate, a second substrate, and a liquid crystal interposed between a pair of the first substrate and the second substrate.

24. A semiconductor device according to claim 19, wherein the semiconductor device comprises a plurality of light-emitting elements having a cathode, a layer containing an organic compound, an anode, and a thin film transistor.

25. A semiconductor device according to claim 19, wherein the semiconductor device is an image-voice two-way communications device or a versatile remote control device.